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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/682,569	10/10/2003	Akio Sumizawa	029267.52835US	1745

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EXAMINER	
HARRISON, CHANTE E	
ART UNIT	**PAPER NUMBER**
2677	

DATE MAILED: 07/25/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/682,569	SUMIZAWA ET AL.	
	Examiner	Art Unit	
	Chante Harrison	2677	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *10 May 2005*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-34* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-34* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

1. This action is responsive to the following communication: Amendment filed on 5/10/05. ***This action is made FINAL.***

2. Claims 1-34 are pending in this application. Claims 1, 8, 10, 11, 15 and 17 are independent claims. Claim 11 has been amended.

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1, 6-17 and 28-34 are rejected under 35 U.S.C. 102(e) as being anticipated by Endo Yoshinori et al., US 2004/169653 A1, 9/2004.

As per independent claim 1, Endo discloses setting a specific route (i.e. selecting optimum connects from current position to instructed destination) (pp. 4, Para 54); specifying map data contained in a slicing range within a predetermined distance from the route having been set based upon map data that include road data and background

data (i.e. map match process identifies map data around the current and destination positions and transmits the data to display, where the map data includes roads and a landscape/background) (pp. 3, Para 49; pp. 5, Para 65, 69); newly creating a new polygon data if an original polygon data contained in the background data included in the specified map data is partially contained in the slicing range and another portion of the original polygon data is outside the slicing range (i.e. polygon "72" is the desired map portion to be viewed; the desired portion is transformed into a new polygon "74", where the remaining background map data is clipped/cut from the data to be displayed) (Fig. 7; Fig. 15A), by removing polygon data corresponding to the portion outside the slicing range from the original polygon data (pp. 7, Para 91); and transmitting a road map specified in correspondence to the map data and background data containing the new polygon data (pp. 7, Para 92).

As per dependent claim 6, Endo discloses the route which is set is a recommended route calculated based upon a current point and a destination indicated in a route search request having been transmitted (pp. 5, Para 66).

As per dependent claim 7, Endo discloses an apparatus (Fig. 2) for implementing the method of claim 1. The rationale as applied in the rejection of claim 1 applies herein.

As per independent claim 8, Endo discloses a reception unit that receives map data transmitted from a map data transmitting apparatus according to claim 7 (Fig. 17); and

a display unit that displays a map based upon the map data having been received (Fig. 17 "2").

As per independent claim 9, Endo discloses a requesting unit that issues a request for the new polygon data (pp. 7, Para 95).

As per independent claim 10, the rationale as applied in the rejections of claims 1 and 8 applies herein.

As per independent claim 11, Endo discloses setting a specific route (i.e. selecting optimum connects from current position to instructed destination) (pp. 4, Para 54); extracting road data corresponding to a first slicing range within a specific first distance from the route having been set (i.e. the first distance range is defined as a travel locus around a current position of the vehicle on the route) (pp. 5, Para 65) and background data corresponding to a second slicing range within a specific second distance from the route having been set (i.e. the second distance range is based on a distance from the viewpoint, which is determined by the position of the route) (pp. 3, Para 30; pp. 6, Para 77, 78), based upon map data that include road data and background data (pp. 3, Para 48; pp. 5, Para 65); and transmitting the road data and the background data having been extracted (pp. 5, Para 69). Endo inherently teaches the second distance is not equal to the first distance as Endo teaches a second distance is determined using a viewpoint relative to a route and the first distance is determined using a travel locus

relative to the route, where the viewpoint position relative to the route is located farther than the travel locus position relative to the route (Fig. 15). Therefore the differing positions of the viewpoint and the travel locus relative to the route indicate differing distances.

As per dependent claim 12, the rationale as applied in the rejection of claim 1 applies herein.

As per dependent claims 13 and 28-29, the rationale as applied in the rejection of claim 6 applies herein.

As per dependent claim 14, the rationale as applied in the rejection of claim 7 applies herein.

As per dependent claim 15, the rationale as applied in the rejection of claim 8 applies herein.

As per dependent claim 16, Endo disclose the new polygon data are displayed in a display mode which indicates that the polygon data on display are different from the original polygon data (i.e. when switching between plan and bird's eye display views the projection angle is varied to indicate a change in display mode) (pp. 8, Para 105).

As per dependent claim 17, the rationale as applied in the rejections of claims 1 and 8 applies herein.

As per dependent claim 30, the rationale as applied in the rejection of claim 12 applies herein.

As per dependent claim 31, the rationale as applied in the rejection of claim 13 applies herein.

As per dependent claims 32-34, the rationale as applied in the rejection of claim 16 applies herein.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. Claims 2-5 and 18-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Endo Yoshinori et al., US 2004/169653 A1, 9/2004.

As per dependent claim 2, Endo fails to specifically disclose in the transmitting step, either the original polygon data or the new polygon data are transmitted based upon data volumes of the original polygon data and the new polygon data, which Yamada discloses (pp. 4, Para 52).

Endo discloses transmitting to display either the new or the original data polygon data based upon the display scale designated by the user, where the display changes smoothly (pp. 9, Para 112-114).

It would have been obvious to one of ordinary skill in the art to incorporate transmission of either polygon data based upon data volumes of both the original and new data with the system of Endo because the data volumes of the data is relative to the scale of the data such that outputting either the original polygon data or the new polygon data enables a smooth change in the display when the desired display scale of map data changes.

As per dependent claim 3, Endo discloses in the transmitting step, either the original polygon data or the new polygon data are transmitted based upon a difference between the original polygon data and the new polygon data (pp. 9, Para 113).

Endo fails to specifically disclose transmitting data based on the difference in the volume of the data.

Endo discloses transmitting data based on a differential value relative to the scale of the data (pp. 9, Para 113) where the differential value is used to determine the change of the map range to be displayed (pp. 9, Para 116 & 118) such that the range increases/decreases towards either the new or the original polygon data.

It would have been obvious to one of skill in the art to incorporate transmitting data based on the difference in the volume of the data with the system of Endo because the volume of data displayed is relative to the scale of the data desired to display; and the use of a differential value in determining a map range to be displayed enables the variation of the map range display between either the new or the original polygon data.

As per dependent claim 4, Endo discloses in the transmitting step, either the original polygon data or the new polygon data are transmitted (pp. 9, Para 112).

Endo fails to disclose transmitting either polygon data based upon an areal ratio of the original polygon data and the new polygon data.

Endo teaches transmitting to display either the new or the original data polygon data based upon the display scale designated by the user, where the display changes smoothly (pp. 9, Para 112-114); and transmitting data based on a differential value

relative to the scale of the data (pp. 9, Para 113) where the differential value is used to determine the change of the map range to be displayed (pp. 9, Para 116 & 118) such that the range increases/decreases towards either the new or the original polygon data. It would have been obvious to one of ordinary skill in the art to incorporate transmitting either polygon data based upon an areal ratio with the system of Endo because the scale of data is relative to the area of the data and the use of a differential value, which is relative to a ratio, in determining a map range to be displayed enables the variation of the map range display between either the new or the original polygon data.

As per dependent claim 5, Endo discloses when the new polygon data are transmitted, information indicating that the new polygon data are transmitted is appended to transmission data being transmitted (i.e. instruction from the data clip means that generates new polygon data is transmitted to the drawing command issuing means) (pp. 6, Para 78; pp. 7, Para 92).

As per dependent claims 18, 19 and 27, the rationale as applied in the rejection of claim 5 applies herein.

As per dependent claims 20-23, Endo discloses the route which is set is a recommended route calculated based upon a current point and a destination indicated in a route search request having been transmitted (pp. 5, Para 66).

As per dependent claim 24, the rationale as applied in the rejection of claim 2 applies herein.

As per dependent claim 25, the rationale as applied in the rejection of claim 3 applies herein.

As per dependent claim 26, the rationale as applied in the rejection of claim 4 applies herein.

Response to Arguments

1. Applicant's arguments filed 5/10/05 have been fully considered but they are not persuasive.

Applicant argues (pp. 12, Para 3) Endo does not teach newly creating a new polygon data if an original polygon data contained in the background data included in the specified map data is partially contained in the slicing range and another portion of the original data is outside the slicing range.

In reply, Endo teaches retrieving map data within a range of the desired travel route and using a data clip means to clip the map data that is outside of a specified distance from the viewpoint (pp. 3, Para 30). The data clip means removes the map data that is beyond the specified distance from the viewpoint (pp. 6, Para 77, 78), such that the data removed is not displayed. Removing a mesh of map data to display a desired viewable region of the map including a desired travel route correlates to newly creating polygon data as the removed data results in display of a modified mesh of map data that is different and thus new as compared to the original mesh of map data.

Regarding claims 10 and 17, the rejection in view of Endo is maintained for reasons provided in the above reply to Applicant's remarks regarding claim 1.

Applicant argues (pp. 13, Para 4) Endo fails to teach extracting road data corresponding to a first slicing range within a specific first distance.

In reply, Endo teaches reading in data of roads that are within a travel locus of the around the current position (pp. 5, Para 65), such that the roads near the current position of the vehicle on the route are displayed with high precision. Thus the data of the roads indicates map data; and the travel locus indicates a specific distance range from which data is to be retrieved.

Applicant argues (pp. 13, Para 4) Endo fails to teach extracting background data corresponding to a second slicing range with a specific second distance from the route having been set which is not equal to the first distance.

In reply, Endo teaches a data clip means that receives input information (Fig. 5) and removes the map data (Fig. 15) that is beyond the specified distance from the viewpoint (pp. 3, Para 30; pp. 6, Para 77, 78). The map data correlates to the background map data that is to be displayed along with the desired route. The specified distance from the viewpoint, which is determined by the position of the route (abstract) and is used to identify map data needed for display indicates a second range within a distance from the route. Additionally, the first distance range, as described in the above reply paragraph, is defined as a travel locus around a current position of the vehicle on the route (pp. 5, Para 65) that improves display precision of roads near the current

position on the route; and the second distance range is based on a distance from the viewpoint, which is determined by the position of the route. Thus, the basis of the first and second distance ranges from differing reference points related to the route indicates that the distance of the second range is not equal to the distance of the first range.

Conclusion

1. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chante Harrison whose telephone number is 571-272-7659. The examiner can normally be reached on Monday, Tuesday and Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sumati Lefkowitz can be reached on 571-272-3638. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Chante Harrison
Examiner
Art Unit 2677

July 18, 2005

SUMATI LEFKOWITZ
SUPERVISORY PATENT EXAMINER